REMARKS

The office action of March 12, 2004 has been carefully considered and the examiner has again rejected all claims as being unpatentable over Ben-Num applied in combination with Sugawara or Sugawara and Bennett. More particularly, claims 1-3, 5-8 and 16-18 have been rejected under 35 U.S.C. 103 as being unpatentable over Ben-Num in view of Sugawara even though Sugawara certainly does not supply the deficiencies of Ben-Num.

With regard to claim 1, the examiner states that Ben-Num and Sugaware "disclose a method and system for permissible transmission in virtual channel credit packet according to the *essential features* of the claims." The undersigned is not aware of any legal precedent that describes the concept of essential features of the claims. If the examiner is asserting that certain elements of a claim can be ignored because it is not considered an 'essential feature' of the claim, the undersigned requests that the legal basis for such a notion be provided, i.e., CAFC decisions, MPEP references, and/or the like. The undersigned does not believe that it exists.

The examiner also refused to enter Amendment B of the parent application for the stated reason that it raised new issues. The March 12, 2004 office action does not provide any insight about what those new issues could have been. The rejection of the claims is based on the same Ben-Num patent as an obviousness rejection rather than an anticipation rejection. The addition of Sugawara is gratuitous because it is merely cumulative of Ben-Num in that it is directed to another complex system, similar to Ben-Num, that certainly does not supply any of the deficiencies of Ben-Num. Combining these two references is also believed to be improper. The comments indicate that both references disclose 'essential features' of the claims. There is nothing stated as to why they would be combined or even if they could be combined. There is no motivation to combine them for the reason that both purport to be fully operable systems. It is a complete mystery as to how either of these references could be modified or why or for what purpose they would or could be modified in a combination.

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What is clear from the examiner's discussion in paragraph 4 is that the examiner has ignored every argument that was presented in the amendment and does not attempt to apply the prior art to the actual claims that are pending, particularly the independent claims 1, 17 and 18. The examine fails to recognize the many advantages of the claimed invention over Ben-Num that were set forth in detail. The law of obviousness is clear from Court of Appeals for the Federal Circuit precedent that the language of the claims simply cannot be met by stating generalities concerning prior art references that distorts their teachings.

Each prior art reference *must* be viewed in its entirely and one cannot ignore portions that argue against obviousness. *Bausch & Lomb, Inc. v. Barnes-Hind Hydrocurve, Inc.*, 796 F.2d 443, 448 (Fed. Cir. 1986), citing *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1550 (Fed. Cir. 1983). In deciding the question of obviousness under 35 U.S.C. 103, it is not permissible to pick and choose from any one reference, only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art. *Smithkline Diagnostics, Inc. v. Helena Laboratories Corp.*, 859 F.2d 878, 887 (Fed. Cir. 1988); *Polaroid Corp. v. Eastman Kodak Co.*, 789 F.2d 1556, 1571 (Fed. Cir. 1986); *Bausch & Lomb, Inc. v. Barnes-Hind Hydrocurve, Inc.*, 796 F.2d 443, 448 (Fed. Cir. 1986), citing *In re Wesslau*, 353 F.2d 238 (CCPA 1965); *Henkel Corp. v. Coral, Inc.*, 21 USPQ2d 1081, 1107 (N.D. Ill. 1990), aff'd 945 F.2d 416 (Fed. Cir. 1991).

It is improper to focus or discriminate on features of prior art references while disregarding its entire disclosure and how its disclosed structure works. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1050-51 (Fed. Cir. 1988), citing *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1568, 1574 (Fed. Cir. 1987); *In re Mills*, 916 F.2d 680, 682 (Fed. Cir. 1990); *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 934, 15 USPQ2d 1321, 1323 (Fed. Cir. 1990).

Ben-Nun simply does not teach or suggest claims 1, 16 and 17, applied singularly or in combination with Sugawara or Bennett. With regard to claim 1, it is directed to a method which includes the steps:

> the receiver sending a single virtual channel credit packet for a particular virtual channel to the transmitter, said credit packet being indicative that said receiver is available to receive a single data packet and having a unique virtual channel number assigned to said particular virtual channel thereto;
> the transmitter responding to said virtual channel credit packet including transmitting a single data packet on said assigned unique virtual channel to the receiver if a data packet is available;

Ben-Nun's system does not operate in this manner; it operates as follows: "In credit-based ATM flow control, which is described fully with reference to FIG. 4, the credit VCI field (68 and 70) of each arriving ATM cell 60 (of FIG. 3) identifies the transmit virtual circuit (VC) which is given a new credit for transmission from a transmitter to a receiver." (column 5, lines 46-51) This operation therefore has the *transmitter* identifying the virtual circuit number in which data is to be transmitting which is exactly opposite to that which occurs in the method of claim 1. As is clearly indicated in claim 1, the *receiver* specifies the unique virtual channel number inasmuch as the unique virtual channel number is part of the credit packet that is sent by the receiver to the transmitter. The transmitter then responds to said virtual channel credit packet by transmitting a data packet on said assigned unique virtual channel to the receiver if a data packet is available.

There is another important difference that has been emphasized in claim 1, in that the claim explicitly states that it is a method for transmitting data *one data packet at a time* between at least one receiver operatively connected to at least one transmitter via at least one high-speed link having a plurality of virtual channels. The method steps also explicitly state that "the receiver sending a *single* virtual channel credit packet . . . and is available to receive a *single* data packet . . ." Similarly, "the transmitter . . . transmitting a *single* data packet . . ."

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This operation is therefore different from Ben-Nun in a very important respect. The claimed method is believed to be more efficient than the system of Ben-Nun for the reason that the *receiver* is the entity which controls the transmission of data and it signals the transmitter that it is available to receive a data packet when it sends a credit packet to the transmitter. *By including the unique virtual channel number in the credit packet, it officially specifies the channel identity which the transmitter then uses to transmit a data packet.* The quoted language from the Ben-Nun specification requires more steps to issue a credit, define a virtual circuit and transmit a data packet than that of the method of claim 1.

Ben-Nun also does not operate on a single credit packet to data packet operation that is set forth in the method as claimed. Applicants' method and system is a less complex type of operation than that described with regard to the Ben-Nun system. Clearly, the use of multiple credits enabling a large number of cells to be sent as well as the use of dynamic tools, static tools, active cues, stalled cues and the like greatly increases the complexity of such a system compared to the method of amended claim 1.

The relative simplicity of Applicants method and system compared to Ben-Nun's system is much more significant that the examiner recognizes. There are other important advantages of applicants' method and system that result from the single credit packet and single data packet type of operation. Applicants' system neither needs nor uses intermediary devices such as Ben-Nun's ATM switches. Since multiple credits are allowed by Ben-Nun, the operation of the devices are more complex. The intermediary devices, such as ATM switches, which applicants' system does not need or use, requires a pool of credits that anticipates the needs of all the different nodes. Ben-Nun's VCIs may not be shared fairly if credits are over-allocated. Applicants' system by definition guarantees fair throughput, since an implementation can know exactly how many VCNs it needs to support. Routing a single VCN is also simpler since the various active and stalled queues are not needed.

The examiner also cites Sugawara for purportedly disclosing a method and system for permissible transmission in virtual channel credit packet according to the essential features of the claim. However, Sugawara is no better than Ben-Num, for it also does not operate in a manner where the receiver is the entity which controls the transmission of data and it signals the transmitter that it is available to receive a data packet when it sends a credit packet to the transmitter. Also, it does not operate in a single credit packet to data packet manner of operation as is set forth in the method as claimed in claim 1.

Sugawara describes an extremely complex system as is set forth in the summary of the invention. It states that a credit control method for an ATM communication apparatus for performing data transfer of a fixed length packet from a packet sending side to a packet receiving side by flow control using credit information and it comprises the many steps of: a) first sending an initial credit value from the packet receiving side to the packet sending side prior to transferring a packet, b) starting the transfer of a packet on the packet sending side when the initial credit value is received, thereafter c) calculating a new credit value on the packet receiving side when the packet is received from the packet sending side, thereafter d) receiving and processing the same number of packets as the number indicated by the calculated new credit value on the packet receiving side, then e) sending a new credit value from the packet receiving side to the packet sending side whenever the same number of receiving buffers as the individual indicated by the preceding new credit value are empty, f) storing on the packet sending side a value obtained by adding the new credit value to the initial credit value from the packet receiving side and finally g) decrementing the stored credit value by one on a packet sending side whenever a packet is sent and continuously transferring packets until the credit value becomes zero or there are no further packets to be sent.

All of these steps are not only described in the Summary of the Invention, they are described in the detailed description of the preferred embodiment, and are also set forth in the claim. This complex system is far afield from that which
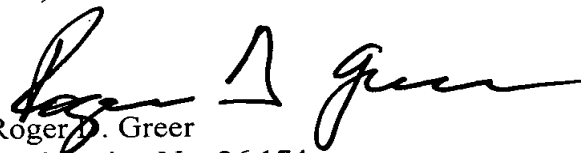
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is claimed in amended claim 1. None of the steps relating to initial credit values, new credit values, calculating the values are necessary in applicants' claimed method. Sugawara totally fails to teach or suggest claims 1, 17 or 18.

For the foregoing reasons, it is believed that neither Ben-Nun or Sugawara teach or suggest claim 1, applied singularly or in combination. Reconsideration and allowance of claim 1 is respectfully requested.

Since claims 16 and 17 are system claims for which the same arguments presented above equally apply, reconsideration and allowance of these claims is also requested. Additionally, since the dependent claims necessarily incorporate the subject matter of the independent claims from which they depend, in addition to reciting other features and functionality, it is believed that the dependent claims are also in condition for immediately allowance. Reconsideration and allowance of all claims presently pending in the application is respectfully requested.

Respectfully submitted,

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